

[0030] ^{A2} In the manufacturing process described above, the metal halide is absorbed by the porous body of the halogen-introduction carrier 25 in a roughly unimolecular layer. Therefore, by controlling the size of the halogen-introduction carrier 25, it is possible to regulate accurately the target amount of halogen introduced, even when the amount is very slight. Specifically, it is possible to absorb 1 μg of bromine in a halogen-introduction carrier that comprises porous body of tungsten 1.1 mm in outside diameter, 2 mm in length and 19 mg in weight. Moreover, because the metal halide absorbed in the halogen-introduction carrier 25 is released by heating, an accurately regulated amount of halogen can be introduced into the space 27, which will become the discharge space, by introducing an halogen-introduction carrier 25 of controlled size into the auxiliary tube 23, heating it to release the halogen, and letting the halogen expand into the space 27.

[0035] ^{A3} During the manufacture of the halogen-introduction carrier, powdered tungsten with an average particle diameter of 5 μm was prepared by mixing with 5 wt-% stearic acid as a binder and heating, then loaded into a mold with columnar mold spaces and compacted with a press to form molded pieces measuring 1.1 mm in outside diameter, 2 mm total length, and 20 mg in weight. The molded pieces thus obtained were heated under a hydrogen atmosphere to produce pre-sinters, and the pre-sinters were sintered in a vacuum to produce halogen-introduction carriers which were columnar porous bodies. A metal halide composed of mercury bromide (HgBr_2) was adsorbed by multiple manufactured halogen-introduction carriers, by the method shown in Figure 4. When one of these halogen-introduction carriers 25 underwent quantitative measurement by means of ion chromatography, the adsorption of 1 μg of bromine was confirmed.

REMARKS

The requested amendments relate to obvious errors for the following reasons:

As indicated in several parts of the description and claims (paragraphs [0013], [0023], [0031], [0036] and claims 8 and 11), the amount of halogen in the discharge maps of the invention is between $1.7 \times 10^4 \mu\text{mol}/\text{mm}^3$ and $6.7 \times 10^4 \mu\text{mol}/\text{mm}^3$, with the volume of the discharge space being at most 80 mm^3 . Since bromine, which is the halogen specifically addressed in the present application and also generally most commonly used, has a molecular